

# Stormwater Utility Fees:

## Finding Funding for Stormwater Management

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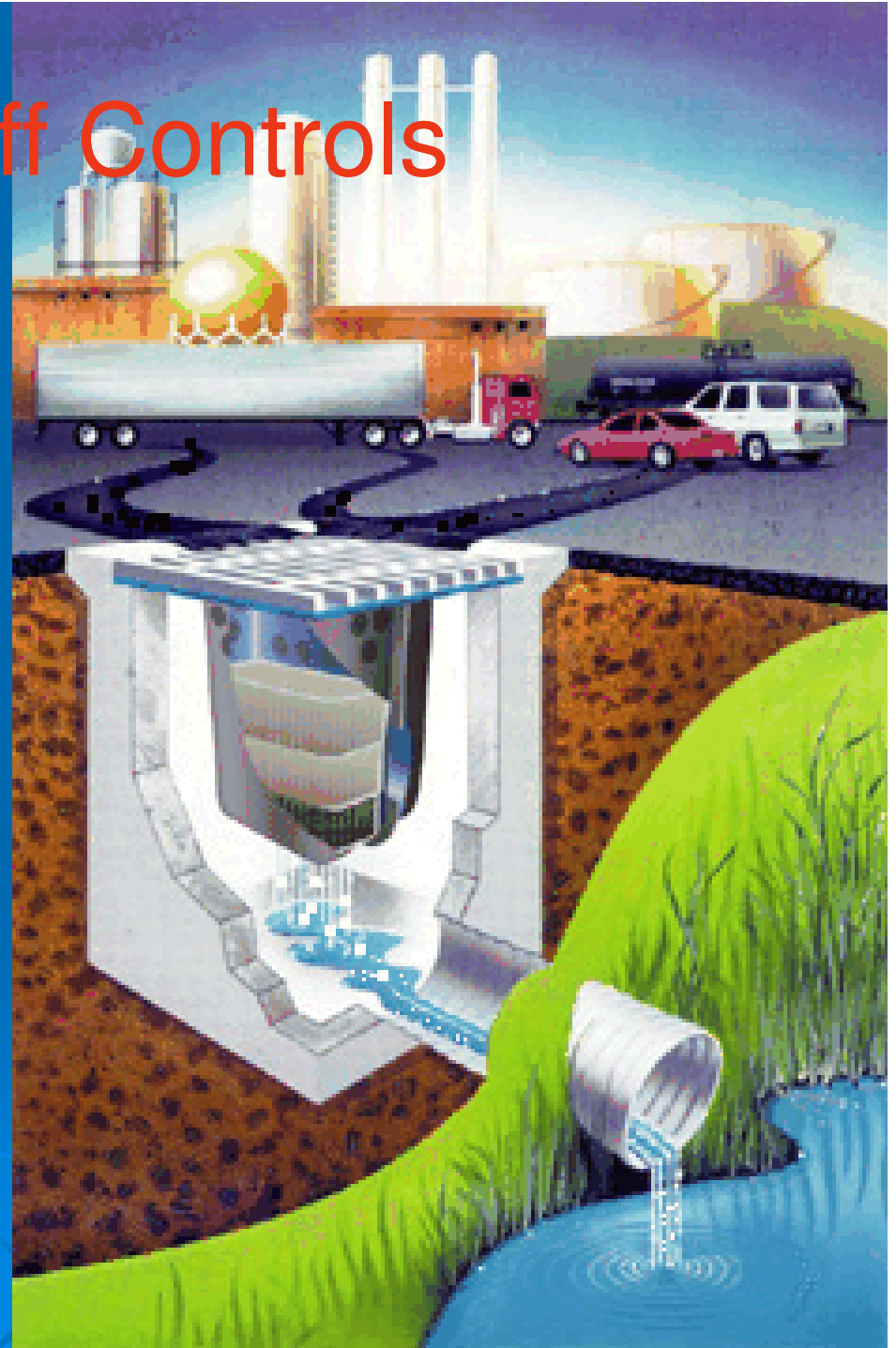
# Development & Water Quality

- Development replaces natural ground covers with impervious surfaces, thereby increasing runoff, a form of non-point source water pollution.



# Engineering Runoff Controls

- Not easy.
- Requires extensive infrastructure to collect, contain, and filter runoff.
- Constructing and maintaining such infrastructure requires a great deal of money.
- Most counties and cities do not have money saved specifically for investing in water quality management programs, and must rely on money in their General Fund to cover these costs.



Solution:

Fee-Supported  
Stormwater Utilities





# The Stormwater Utility

Principal functions of a Stormwater Utility include:

- educating citizens on the effects of runoff
- creating and maintaining retention ponds
- constructing and restoring stormwater pipes and ditches
- constructing stormwater treatment facilities
- encouraging landscaping techniques that reduce runoff

Most stormwater utilities are fee-supported, meaning residential, commercial and industrial property owner pay monthly fees that fund the utility.

Ft. Collins Colorado avg. res. monthly fee is \$12.20,

Virginia Beach avg. res. monthly fee is \$4.50

# Does James City County Need a Stormwater Utility?



# Facts on James City County

- Population = 48,000 in 2000
- Development is occurring very rapidly.
- J.C.C. population has increased 111% since 1980.
- There is not enough money in the General Fund to cover the costs of improving stormwater infrastructure.
- Approximately 1 in 5 retention ponds in the county currently require maintenance.

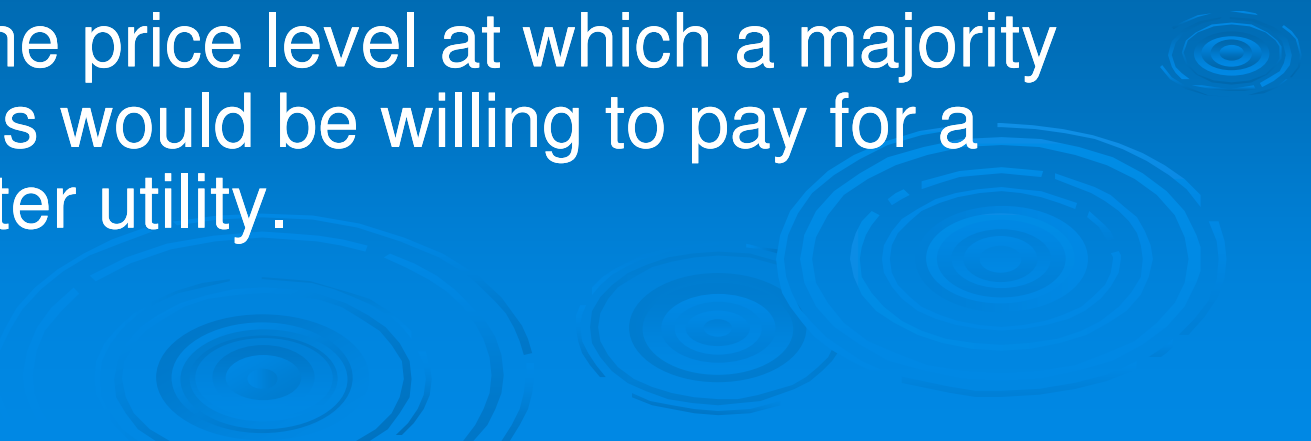
# Are Citizens Willing to Pay New Fees?






# The Survey

## Goals:

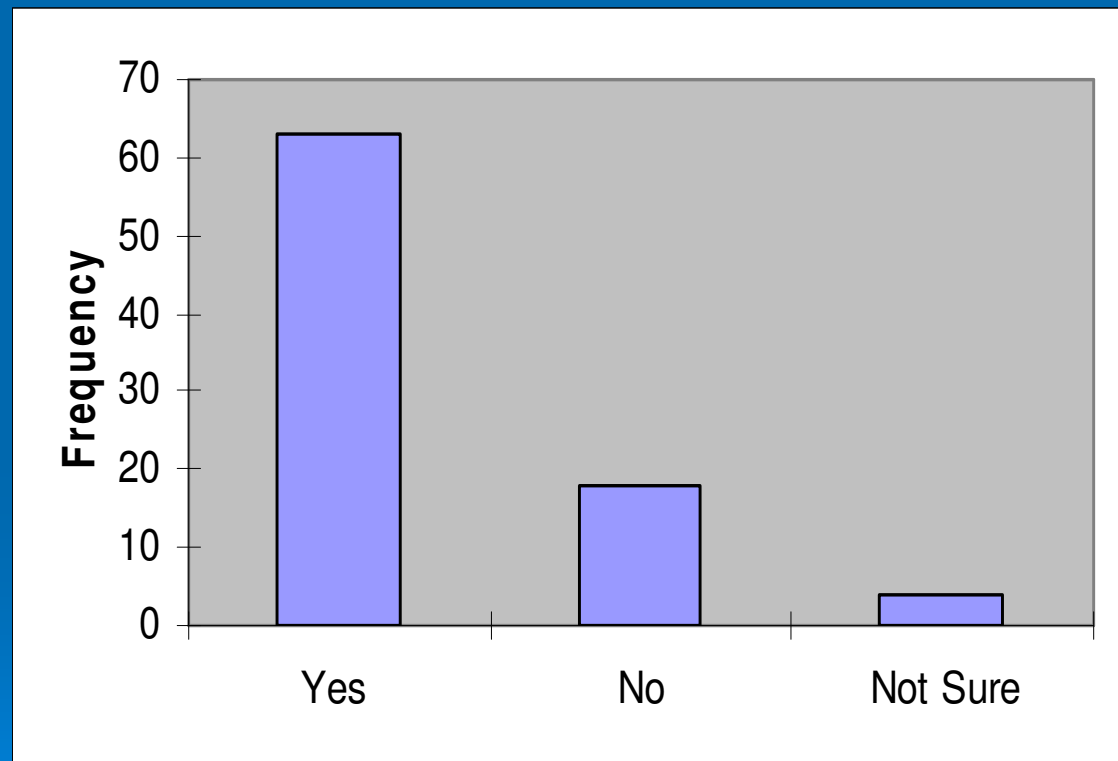
- determine J.C.C. citizens' awareness of the effects of runoff.
  - learn how citizens feel about paying monthly fees for stormwater protection.
  - determine citizens' preferences when choosing among different fee options.
  - ascertain the price level at which a majority of citizens would be willing to pay for a stormwater utility.
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# Methodology

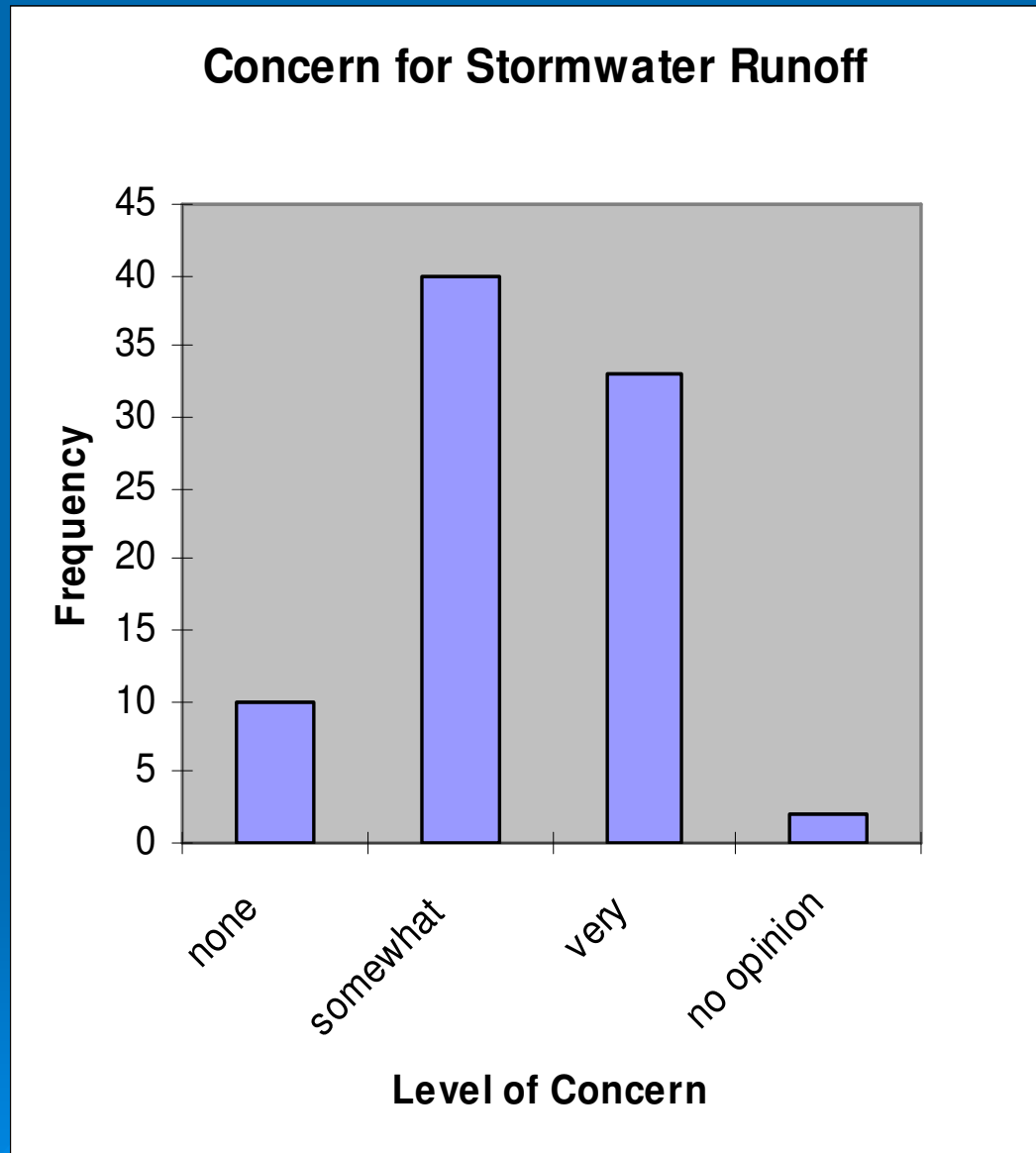
- Design questions to gauge citizens' awareness on broad environmental issues including the effects of runoff.
  - Inform survey-takers on 3 different types of stormwater management plans.
  - Create questions that allow survey-takers to choose their preferred stormwater management plan. On these questions vary the price of the monthly fee to determine at what price level a majority of citizens are willing to pay fees.
  - Select 3 clusters of neighborhoods in James City County. Within the selected neighborhoods, randomly select 200 houses to receive surveys.
  - Personally deliver surveys to each household selected and give survey takers the option of mailing their survey back or leaving it on their doorstep to be collected later that day.
  - Make sure citizens know their opinions on the survey are confidential, and that their views may help shape policy making in their county.
- 

“Were you aware, prior to reading this survey, that unmanaged stormwater runoff might cause erosion, flooding, and pollution of watersheds?”

Most citizens are conscious of the potential effects of stormwater runoff.



Most  
citizens are  
concerned  
about the  
effects of  
stormwater  
runoff.



# But Will They Pay?

11. Below, is table with the stormwater management plans you've read about. After comparing the plans, please pick which management plan you prefer by putting an X in the appropriate box.

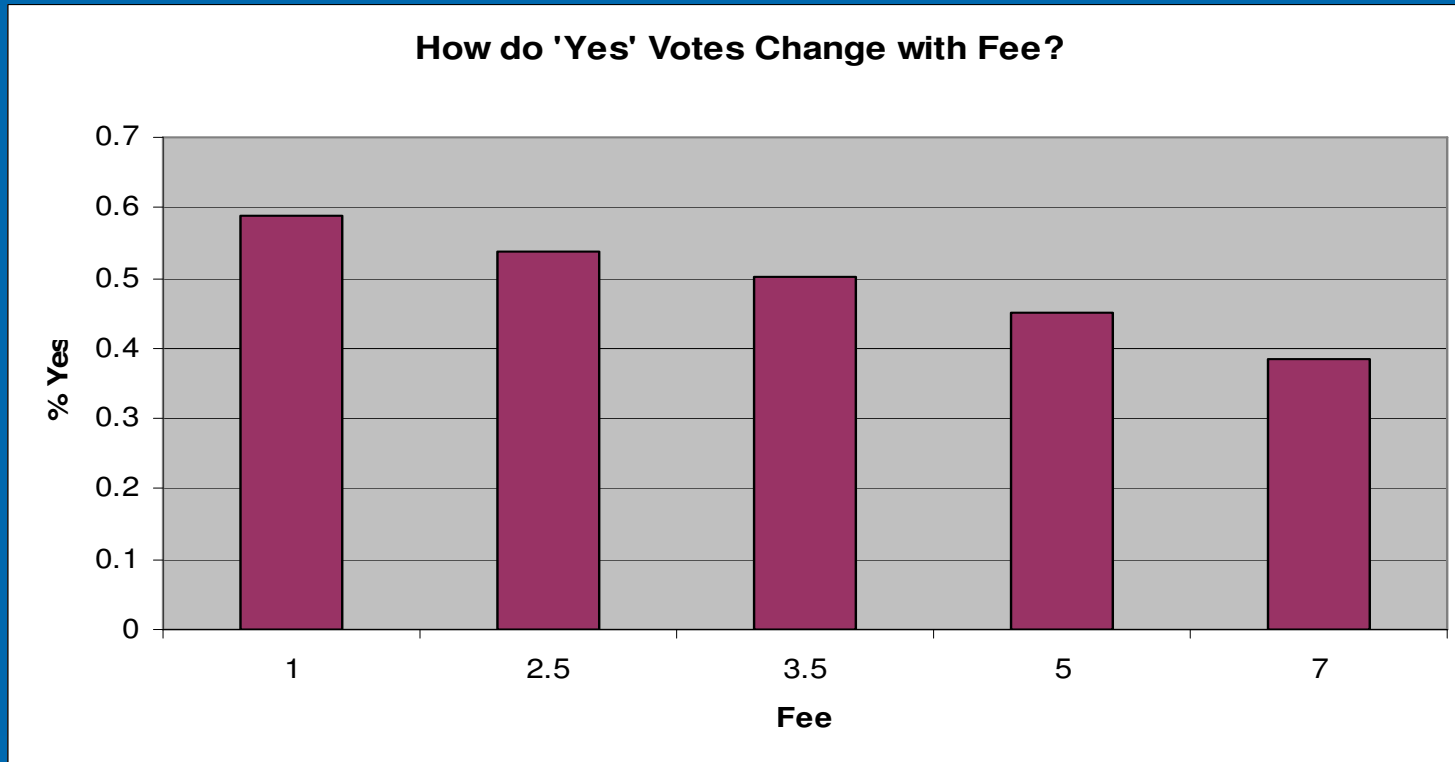
	County Fee Plan		Neighborhood Plan
	Fee Only	Fee and Credit	
Your Monthly Fee	\$3.00	\$3.00	<p>Your monthly utility bill will not increase.</p> <p>Your neighborhood incurs all costs for maintaining stormwater control devices in your neighborhood.</p>
Monthly Credit	- \$0.00	- \$1.00	
Your Net Monthly Fee			
Credit activity	No Credit Activity	Rain Barrel	
<b>11a) Which option do you MOST prefer?</b>  (Please check <i>only one</i> box.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Each survey contained 3 questions like this one that presented survey-takers with 3 stormwater management options and asked them to choose the one they preferred.

For each of the three questions, varying fee prices were presented.

Eight different versions of these 3 questions were created to further vary the price options presented to survey-takers.

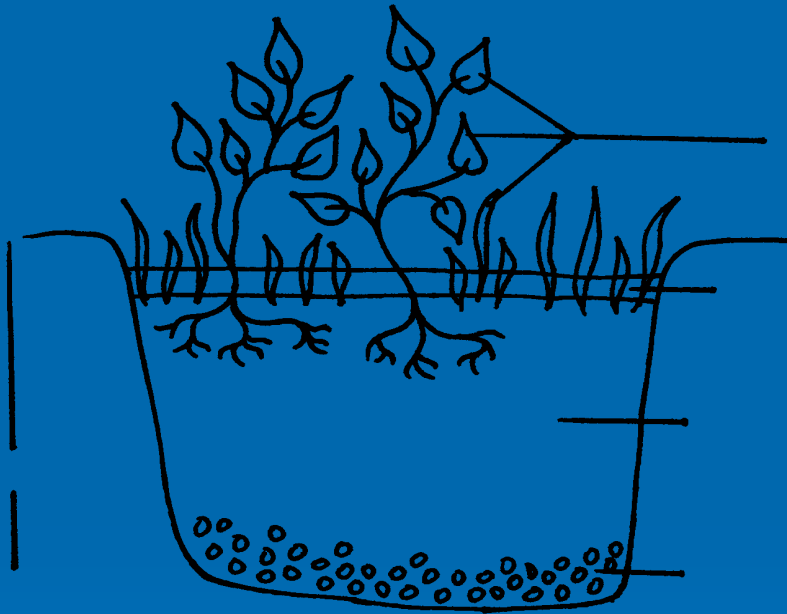
# Results



As expected, respondents were sensitive to fee prices. The lower the price of the monthly fee, the more people chose a countywide fee-based stormwater management program over a plan that gave neighborhood associations responsibility for stormwater management.

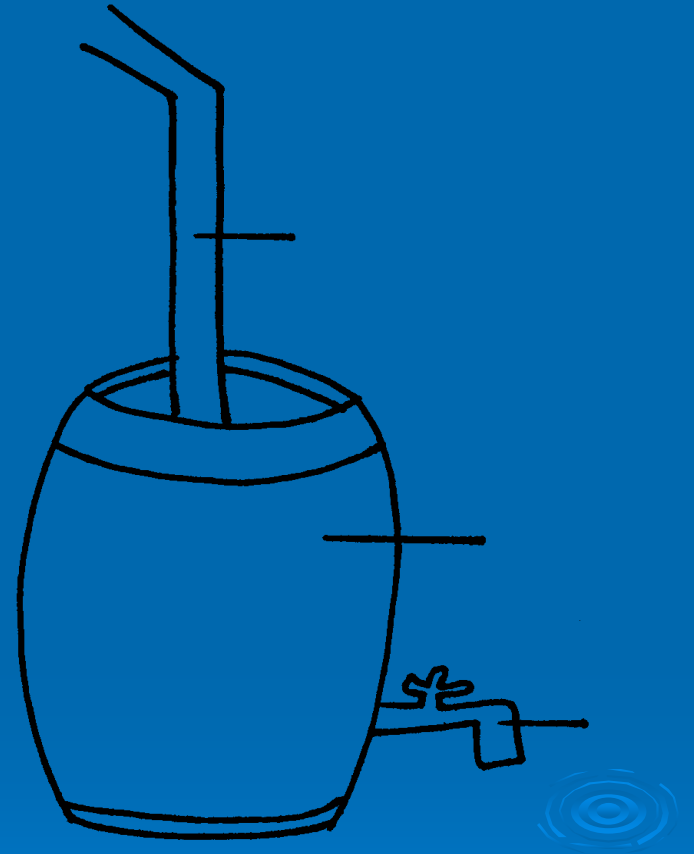
At a monthly fee of \$2.50, more than 50% of respondents indicated they would be willing to pay for a stormwater utility to manage runoff.

Residents will participate in credit activities, but only if fees are substantially lower.



Rain Garden

Residents will pay \$1.20 monthly



Rain Barrel

Residents will pay \$0.20 monthly

# Conclusions, Considerations & Continuing the Study

- Based on our sample population, 2/3 of J.C.C. residents said they are willing to pay for a fee-supported stormwater utility to manage runoff.
- Our sample population was relatively small.
- No monetary cost for Neighborhood responsibility Plan
- Residents will only participate in credit activities if the credit activity substantially reduces their monthly fee.
- There may be ways to make credit options less costly
- No study on commercial or industrial fees.



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